

ABSTRACT

An image encoding/decoding system and method for producing a computer-generated security device which can be printed onto a document, such as a passport, to secure the document against data alteration. Deflection encoding means comprises means for applying a selected software lens to a source image and producing a deflected image. Encryption encoding means comprises means for applying an encryption function to the deflected image or a source image and producing an encrypted image. Overlaying means is provided for overlaying the deflected and encrypted images and producing therefrom the security device image. The deflected image may be detected from the security device image both by means of a manual lenticular lens corresponding to the software lens applied to a printing of the security image and by means of computer decoding processing applying the software lens. However, the encrypted image may be detected from the security device image solely by means of computer decoding processing applying a decryption function corresponding to the encryption function.